

## PATENT CLAIMS

1. An arrangement for the tower (3) of a floating wind power station (1) which floats in an essentially vertical position in that the effective centre of gravity of the tower (3) is below the centre of buoyancy of the tower (3), and wherein a machine  
5 house (13) including rotor (15) is non-rotationally connected to the tower (3) and the tower (3) is articulatedly connected to the seabed (5),  
c h a r a c t e r i s e d i n that the tower (3) is rotatable about a tower rotational axis (29) in that a lower part (21) of the tower (3) is provided with a swivel joint (27a or 27b) that is designed to essentially absorb vertical tensile  
10 forces.
2. An arrangement according to claim 1,  
c h a r a c t e r i s e d i n that the tower axis of rotation (29) is essentially coincident with the centre axis of the tower (3).
3. An arrangement according to claim 1,  
15 c h a r a c t e r i s e d i n that the tower axis of rotation (29) is essentially at an angle to the centre axis of the tower (3).
4. An arrangement according to claim 1,  
c h a r a c t e r i s e d i n that a bearing housing (31) for the swivel joint (27a or 27b) is connected to a tensioned anchor leg (7) via a freely bendable joint (25)
- 20 5. An arrangement according to claim 1,  
c h a r a c t e r i s e d i n that the bearing housing (31) is surrounded by a casing (37) which, together with the swivel joint (27a or 27b) and essentially downward directed seals (34, 39), forms communicating annular spaces (32, 40).
6. An arrangement according to claim 1,  
25 c h a r a c t e r i s e d i n that the communicating annular spaces (32, 40) are designed to hold a lubricant enclosed by means of water pressure directed towards the essentially downward directed seals (34, 39) of the casing (37).
7. An arrangement according to claim 1,  
c h a r a c t e r i s e d i n that the tower (3) is provided with tension rod(s)  
30 (61) and outrigger(s) (63).
8. An arrangement according to claim 1,  
c h a r a c t e r i s e d i n that the upper part (9) of the tower (3) is aerodynamically designed, i.e., with a non-circular cross-section, or provided with aerodynamic screens (71) preferably partially rotatable about the tower.

9. An arrangement according to one or more of the preceding claims, characterised in that the tower (3), its lower part (21), the swivel joint (27a or 27b), the joint (25) and the tension leg (7) are provided with open central passages (51, 53, 55) for the routing of cables.
- 5 10. An arrangement according to claim 1, characterised in that the swivel joint (27a or 27b) is provided with means for forced rotation of the tower (3).